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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,284	12/30/2003	Tiao-Hung Hsiao	B-5337 621606-5	2377

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EXAMINER	
RIELLEY, ELIZABETH A	

ART UNIT	PAPER NUMBER
2879	

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/751,284	HSIAO, TIAO-HUNG	
	Examiner	Art Unit	
	Elizabeth A. Rielley	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Amendment filed 5/9/06 has been entered and considered by the Examiner. Currently, claims 1-15 are pending in the instant application.

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 7-9, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamazaki et al (US 20010026125).

In regard to claim 1, Yamazaki et al ('125) teach an organic electro-luminescent display device (figure 1b) comprising: a glass substrate (101; paragraph 36); an optic-compensation film of transparent dielectric material (103; paragraphs 35-37) formed on the surface of the glass substrate (101; see figure 1b); an anode layer (104; paragraphs 38 and 42) formed directly on the optic-compensation film (103; see figure 1b); a laminated body of organic material (106; paragraphs 39 and 40) formed on the anode layer

(104; see figure 1b); and a cathode layer (107; paragraph 39) formed on the laminated body (106; see figure 1b).

In regard to claims 2 and 9, Yamazaki et al ('125) teach the optic-compensation film is silicon nitride (paragraph 37).

In regard to claims 7 and 15, Yamazaki et al ('125) teach the organic electro-luminescent display device is an OLED device or a PLED device (paragraphs 35 and 40).

In regard to claim 8, Yamazaki et al ('125) teach a method of forming an organic electro-luminescent display device (figure 1b) comprising: providing a glass substrate (101; paragraph 36); forming an optic-compensation film of transparent dielectric material (103; paragraphs 35-37) formed on the surface of the glass substrate (101; see figure 1b); forming an anode layer (104; paragraphs 38 and 42) directly on the optic-compensation film (103; see figure 1b), in which the transparent nature of the optic-compensation film is not limited to light of a specific wavelength (Yamazaki does not teach that the compensation film *is* limited to a light of a specific wavelength); forming a laminated body of organic material (106; paragraphs 39 and 40) formed on the anode layer (104; see figure 1b); and forming a cathode layer (107; paragraph 39) formed on the laminated body (106; see figure 1b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 4, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al (US 20010026125) in view of Yamazaki et al (US 6815723).

In regard to claims 3 and 10, Yamazaki et al ('125) teach all the limitations set forth, as described above, except the optic-compensation film is of a 100-3000 Å. Yamazaki et al ('723) teach an optic-compensation film within the range of 100-3000 Å (column 14 lines 51-58) in order to better protect the OLED (column 4 lines 40-44 teach that the oxynitride film relieves stress; column 14 lines 51-58 states the optimum range for this is between 100-3000 Å). Hence, it would have been obvious at the time of the invention to one of ordinary skill in the art to combine the OLED of Yamazaki ('125) with the range for the optic-compensation film of Yamazaki et al ('723). Motivation to combine would be to better relieve the stress in the OLED.

In regard to claims 4, 11, and 12, Yamazaki et al ('125) are silent regarding the limitations that the optic compensation film promotes transparency of red light to approximately 90% thereby increasing the transparency of red light. However, since Yamazaki et al ('125) in view of Yamazaki et al ('723) teach a display with a transparent silicon nitrate film that is between 100-3000 angstroms thick, it would have naturally promoted the transparency of the red light to approximately 90% thereby increasing the transparency of red light, since Yamazaki et al ('446) in view of ('723) meet all the claimed recitations of the final product manufactured. Hence, it would have been obvious at the time of the invention to one of ordinary skill in the art to combine the display of Yamazaki et al ("446) with the SiNx thickness of Yamazaki et al ('723), thereby naturally obtaining a transparency of red light to approximately 90% thereby increasing the transparency of red light. Motivation to combine would be to allow more light to pass through the display.

Claims 5, 6, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al (US 20010026125) in view of Applicant's Specification.

In regard to claims 5 and 13, Yamazaki et al ('125) teach all the limitations set forth, as described above, except that the anode layer is ITO. Applicant's Specification on page 1 line 23 to page 2 line 4 states that it is conventional knowledge that an anode layer in an OLED has the advantages of facile etching, low film-formation temperature, and low resistance. The MPEP states that "[w]here the specification identifies work done by another as "prior art," the subject matter so identified is treated as admitted prior art. In re Nomiya, 509 F.2d 566, 571, 184 USPQ 607, 611 (CCPA 1975). Hence, it would have been obvious at the time of the invention to one of ordinary skill in the art to combine the OLED of Yamazaki with using ITO as an anode material. Motivation to combine would be make use of the advantages of the ITO material, the advantages such as facile etching, low film-formation temperature, and low resistance.

In regard to claims 6 and 14, Yamazaki et al ('125) teach all the limitations set forth, as described above, except the laminated body comprises a hole-injecting layer formed on the anode layer; the organic luminescent material formed on the hole-injecting layer; an electron-injecting layer formed on the organic luminescent material layer. However, one skilled in the art would reasonably contemplate modifying the device of Yamazaki et al ('125) to include the claimed laminated layers, as an obvious matter of design engineering as evidenced by Applicant's specification, page 1 line 23 to page 2 line 1 states that such layers are conventional knowledge. The MPEP states that "[w]here the specification identifies work done by another as "prior art," the subject matter so identified is treated as admitted prior art. In re Nomiya, 509 F.2d 566, 571, 184 USPQ 607, 611 (CCPA 1975). Applicant's claimed material does not provide

unexpected results that are not within the teaching applied, since both the laminated layers disclosed in Yamazaki as well as the layers claimed by the Applicant perform the same function of increasing the electron flow into the organic electroluminescent material and releasing the energy as light. Thus, it would have been obvious at the time of the invention to one of ordinary skill in the art to combine the OLED of Yamazaki with the laminated layers as taught by the Applicant's Specification. Motivation to combine would be to increase the electron flow into and out of the organic electroluminescent device.

Response to Arguments

Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Rielley whose telephone number is 571-272-2117. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elizabeth Rielley

Examiner
Art Unit 2879

MARICELI SANTIAGO
PRIMARY EXAMINER